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REMARKS

This response is intended as a full and complete response to the Final Office Action mailed on June 25, 2003. The amendments above have been made to clarify the claim language for appeal. The Applicants submit that the claim language has been amended to make explicit limitations that were implicit to the claim language. Therefore, the Applicants believe that the scope of the claims remains unchanged and the claims are now in better condition for appeal. Moreover, in view of the amendments presented above and the following discussion, the Applicants believe that all claims are in allowable form.

CLAIM REJECTIONS

A. 35 U.S.C. §103(a) Claims 1-25, 30-33, and 35-39

Claims 1-25, 30-33, and 35-39 stand rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 5,679,063, issued October 21, 1997 to *Kimura, et al.* ("*Kimura*") in view of United States Patent No. 5,816,900, issued October 6, 1998 to Nagahara, et al. ("*Nagahara*"). The Applicants respectfully disagree.

The burden for establishing a prima facie case of obviousness falls on the Examiner. See, *MPEP* §2142. A basic requirement of establishing a prima facie case of obviousness is that the combination of prior art references must teach or suggest all the claim limitations and that there must be a motivation to combine the references. See, *MPEP* §2143.

Kimura teaches a polishing apparatus for polishing the surface of an object which supplies a polishing solution of different concentrations along a radial direction of a polishing cloth. (See, *Kimura*, Abstract) The creation and utilization of the concentration gradient is critical to the objective of the *Kimura* – "fine tuning of the rate of removal of the surface material of the object by adjusting the concentrations of the polishing solution..." (See, *Kimura*, col. 2, ll. 11-13) – thus teaching away from utilizing a polishing fluid with a uniform concentration as recited

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by claims 1-25, 30-33, and 35-39. Therefore, *Kimura* may not be utilized in combination with any other reference to render the claimed invention obvious.

Additionally, *Nagahara* teaches delivering a polishing fluid through a polishing pad at dissimilar flow rates. For example, by providing polishing fluid with sufficient force through the pad to the outer perimeter of the substrate, the polishing rate at the substrate's perimeter will increase to offset the normally higher polishing rate at the substrate's center due to higher contact forces at the substrate's center as the substrate is pressed against the polishing pad. See, *Nagahara*, column 5, lines 40-56. Thus, *Nagahara* teaches forcibly applying polishing fluid through the polishing pad to counteract the higher contact forces at the substrate's center. This result cannot be achieved by dispensing polishing fluid through a fluid delivery arm, and therefore, *Nagahara* teaches away from utilizing a polishing fluid delivery arm to provide polishing fluid as recited by claims 1-25, 30-33, and 35-39.

Thus, *Kimura* and *Nagahara* cannot be combined to yield the claimed invention because any combination of *Kimura* and *Nagahara* would include a teaching of supplying polishing fluid at different concentration to the polishing surface. Moreover, there is no motivation to combine *Kimura* and *Nagahara* in a manner that yields the claimed invention as *Kimura* teaches to control polishing by controlling concentration of fluid applied to the top of the polishing surface while *Nagahara* to control polishing by controlling the pressure exerted by the pad against the substrate by flowing fluid through the pad. Therefore, the combination of *Kimura* and *Nagahara* teaches a device or method that controls polishing by controlling the flow of polishing fluid having different concentrations to a polishing surface through a polishing pad.

As *Kimura* and *Nagahara* teach away from the claimed invention, *Kimura* and *Nagahara* cannot be combined in a manner to teach or suggest a polishing fluid delivery arm that provides polishing fluid of equal concentration as recited by the claimed invention. Thus, claims 1-25, 30-33, and 35-39 are patentable over *Kimura* in view of *Nagahara*. Accordingly, the Applicants respectfully request the rejection to claims 1-25, 30-33, and 35-39 be withdrawn.

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B. 35 U.S.C. §103(a) Claims 26 and 27

Claims 26 and 27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Kimura* in view of *Nagahara* as applied to claim 23 above, further in view of United States Patent No. 5,433,650, issued July 18, 1995 to Winebarger ("*Winebarger*"). The Applicants respectfully disagree.

Kimura in view of *Nagahara*, and further in view of *Winebarger* does not recite all of the limitations contained in claims 26 and 27. As discussed above, *Kimura* and *Nagahara* cannot combine to teach or suggest all of the limitations described in claim 23, from which claims 26 and 27 depend. *Winebarger* teaches a method for polishing a substrate in which the polishing rate of the substrate is automatically adjusted during the polishing process. In one embodiment, *Winebarger* describes a closed loop polishing process in which the polishing rate is automatically adjusted by modifying the frequency at which slurry is dispensed onto the polishing surface or the quantity of slurry that is dispensed. *Winebarger*, column 4, lines 24-26. However, *Winebarger* does not teach or suggest flowing a polishing fluid at a first location at a first rate and flowing a polishing fluid of equal concentration at a second location at a second rate that is different from the first rate, as recited by claim 23, from which claims 26 and 27 depend. Therefore, *Winebarger* does not teach or suggest a modification to the combination of *Kimura* and *Nagahara* that would yield a method having all of the limitations recited by claims 26 and 27.

Thus, claims 26 and 27 are patentable over *Kimura* in view of *Nagahara*, and further in view of *Winebarger*. Accordingly, the Applicants respectfully request the rejection to claims 26 and 27 be withdrawn.

C. 35 U.S.C. §103(a) Claim 34

Claim 34 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Kimura* in view of *Nagahara* as applied to claim 31 above, further in view of United States Patent No. 6,139,406, issued October 31, 2000 to Kennedy ("*Kennedy*"). The Applicants respectfully disagree.

Kimura in view of *Nagahara*, and further in view of *Kennedy* does not recite all of the limitations recited by claim 34. As discussed above, *Kimura* and *Nagahara*

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cannot combine to teach or suggests all of the limitations described in claim 31, from which claim 34 depends. *Kennedy* teaches a combined slurry and rinse arm in which a slurry delivery line or multiple slurry delivery lines are disposed within the arm. However, *Kennedy* does not teach or suggest different volumes of polishing fluid of equal concentration disposed on a polishing material when contacting the substrate positioned on the polishing material as recited by claim 31, from which claim 34 depends. Therefore, *Kennedy* does not teach or suggest a modification to the combination of *Kimura* and *Nagahara* that would yield a system having all of the limitations recited by claim 34.

Thus, claim 34 is patentable over *Kimura* in view of *Nagahara*, and further in view of *Kennedy*. Accordingly, the Applicants respectfully request the rejection to claim 34 be withdrawn.

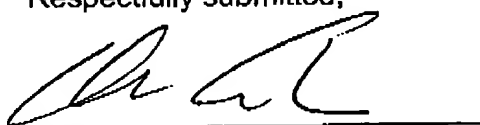
CONCLUSION

Thus, the Applicants submit that all claims now pending are in condition for allowance. Accordingly, both reconsideration of this application and swift passage to issue are earnestly solicited.

If the Examiner believes that any unresolved issues still exist, it is requested that the Examiner telephone Keith Taboada at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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